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2 June 1975

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Type II Progress Report for Period April 1, 1975 to May 31, 1975

Prepared for: National Aeronautics and Space Administration
Goddard Space Flight Center
Greenbelt, Maryland 20771

A. Problems - None

B. Accomplishments

1) Per a request from NOAA a detailed review was made pertaining to the use of Kodak 2575 film in NOAA supplies 70mm LANDSAT II imagery for enhancing coastal processes. A comparison was made between the standard 70mm negatives on Kodak 2422 film and the resulting prints with those made on 2575 film. The conclusion was to recommend continued supply of the standard NOAA film Kodak 2422. The reasons for this conclusion are:

- a) a characteristic curve (log exposure vs. density) would have to be calculated for each individual light source in order to use 2575 film to its fullest potential. This would result in extra costly laboratory time.
- b) to use 2575 film custom processing for each individual LANDSAT frame would be necessary. For maximum coastal processes information the technician would have to vary processing according to density differences between open water and maximum sediment plume, time of year and spectral channel.
- c) the use of the custom techniques described are still possible starting at the investigators laboratory on a limited basis.

N75-28483

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(E75-10345) [LANDSAT-2 IMAGERY FOR
ENHANCING COASTAL PROCESSES] Progress
Report, 1 Apr. - 31 May 1975 (Corps of
Engineers, San Francisco, Calif.) \$3.25

2) A first review has been made of the limited LANDSAT frames available to date. During the month of March 1975 off the Humboldt Bay area interesting current phenomena were observable. At the beginning of the month the north moving Davidson Current was dominant. Before the end of the month, however, the California Current had reversed this trend and the coastal currents were southbound. A number of upwellings and current gyres were clearly visible. This is significant in the evaluation of sediment transport and fisheries in the area.

3) During the next three month period investigation plans include: enhancement and evaluation of offshore currents, plan aircraft flight in Channel Island area simultaneous with LANDSAT overpass, and correlation of the available imagery with the five specified Corps ongoing coastal projects.

C. Significant Results - None

D. Publications - None

E. Recommended Changes - None

F. Funds Expended - \$2,950

G. Data Use Tabulation

Value of data allowed	\$6,300.00
Value of data ordered	<u>\$103.00</u>
Value of data received	<u>\$81.00</u>